

No.

7900016



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Crispy'



In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 14th day of June in
the year of our Lord one thousand nine
hundred and seventy-nine

Attest:

Burnett H. Lane
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

B. B. B. B.
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED
OMB NO. 40-R3822

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY XP 480		1b. VARIETY NAME CRISPY #47 5/30/79		FOR OFFICIAL USE ONLY PV NUMBER 7900016	
2. KIND NAME Lettuce		3. GENUS AND SPECIES NAME Lactuca sativa		FILING DATE 11-22-78	TIME 2:30 P.M.
4. FAMILY NAME (BOTANICAL) Compositae		5. DATE OF DETERMINATION 5-3-74		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 11-22-78 5-29-79
6. NAME OF APPLICANT(S) Asgrow Seed Company		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Kalamazoo, Michigan 49001		8. TELEPHONE AREA CODE AND NUMBER (616) 385-6605	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Delaware		11. DATE OF INCORPORATION March 22, 1968
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: John A. Batcha; Asgrow Seed Company; Unit 9630-190-1; Kalamazoo, MI 49001					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☐ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☐ NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

October 17 1978
(DATE)

John A. Batcha
(SIGNATURE OF APPLICANT)
John A. Batcha

1

(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.

13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.

14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)

15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

EXHIBIT A

ORIGIN AND BREEDING HISTORY

- 1961 Cross made Vanguard x Great Lakes 659
- 1962 F_1 plants selected and grown for a bulk of F_2 seed.
- 1963-1972 Selections made by standard pedigree procedures for desirable type through F_{12} generation.
- 1973 Variety determined to be uniform and bulk seed increase made.
- 1974 Seed increase and trials.
- 1975 Trials.
- 1976 Seed increase and trials.
- 1977 Seed increase and trials.

During multiplication a large leaved non-heading offtype was observed at approximately the 0.1% level.

XP 480 lettuce is uniform and stable. Uniformity was established in 1973 trials. Stability was established in trials and increases since 1973 where XP 480 has been found uniform with variants within commercially acceptable limits.

Asgrow Seed Company

Lettuce, XP-480

CRISPY ~~5/30/79~~

7900016

EXHIBIT B

NOVELTY STATEMENT

To our knowledge the variety which most closely resembles XP 480 is Vanguard. Characteristics which make XP 480 a different variety include but are not restricted to the following:

Maturity - XP 480 is 1-2 weeks earlier in maturity than Vanguard as evidenced by 1977 Arizona trials where a 14 day difference was observed and in 1978 trials where XP 480 was ready to cut 5-6 days earlier.

Core Diameter - XP 480 has a larger core as is evidenced by 1977 California trials where 30 heads of XP 480 measured 33.8mm and 30 heads of Vanguard measured 31.1mm.

Wider Adaptation - In California and Arizona trials XP 480 developed useable heads while Vanguard did not.

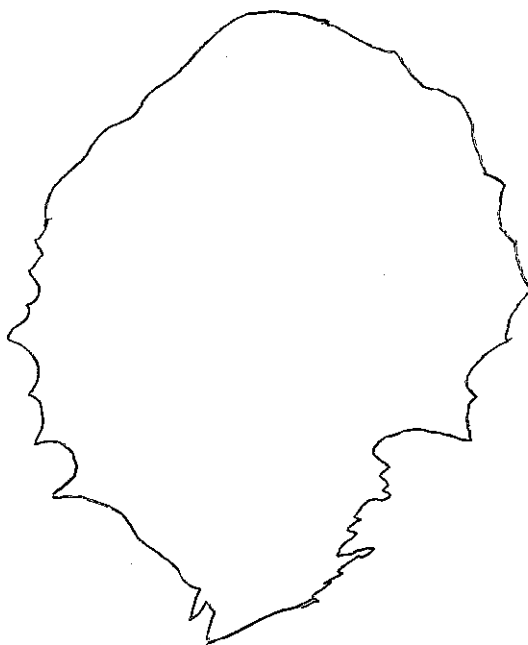
In addition to the above differences which establish novelty, trials indicate XP 480 has more upright leaves, lighter color leaves, and is more prone to produce seed stalks.

Asgrow Seed Company

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Lettuce, ~~XP-480~~

CRISPY ~~5/27~~ 5/30/79

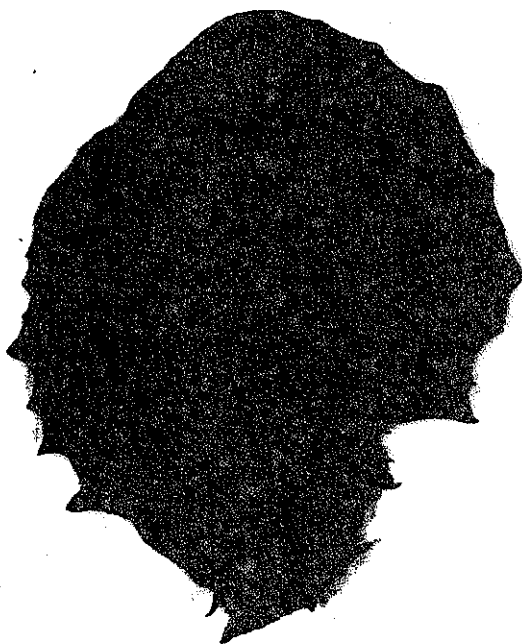


Asgrow Seed Company

Lettuce, ~~XP-480~~

CRISPY ~~7/4~~ 5/30/79

7900016



OBJECTIVE DESCRIPTION OF VARIETY
(LETTUCE)

INSTRUCTIONS: See reverse.

NAME OF APPLICANT(S) Asgrow Seed Company	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Kalamazoo, Michigan 49001	PVPO NUMBER 297 - 1 - 7900016
	VARIETY NAME OR TEMPORARY DESIGNATION X-480 CRISPY #4 5/30/79

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. PLANT TYPE: <table><tr><td><input type="text" value="4"/> <input type="text" value="3"/></td><td>10 = CUTTING (Leaf)</td><td>20 = STALK</td></tr><tr><td></td><td>50 = BUTTERHEAD</td><td>60 = LATIN</td></tr><tr><td></td><td colspan="2">70 = OTHER (Specify) _____</td></tr></table>		<input type="text" value="4"/> <input type="text" value="3"/>	10 = CUTTING (Leaf)	20 = STALK		50 = BUTTERHEAD	60 = LATIN		70 = OTHER (Specify) _____		30 = COS 31 = SELF-CLOSING GROUP 32 = LOOSE-CLOSING GROUP	40 = CRISPHEAD 41 = IMPERIAL GROUP 42 = GREAT LAKES GROUP 43 = VANGUARD 44 = NEW YORK GROUP
<input type="text" value="4"/> <input type="text" value="3"/>	10 = CUTTING (Leaf)	20 = STALK										
	50 = BUTTERHEAD	60 = LATIN										
	70 = OTHER (Specify) _____											
2. SEED COLOR: <input type="text" value="2"/> 1 = WHITE 2 = BLACK 3 = YELLOW		3. ANTHOCYANIN: <input type="text" value="1"/> 1 = ABSENT 2 = PRESENT										
4. LEAF CONTAINING ANTHOCYANIN: <input type="text" value="4"/> 1 = COVERED 2 = SPOTTED 3 = ALONG MARGIN 4 = ABSENT 5 = OTHER (Specify) _____												
5. LEAF SURFACE TEXTURE: <input type="text" value="2"/> 1 = SMOOTH 2 = BLISTERED		6. LEAF SURFACE REFLECTANCE: <input type="text" value="2"/> 1 = DULL 2 = GLOSSY 3 = OTHER (Specify) _____										
7. LEAF MARGIN: <input type="text" value="2"/> 1 = STRAIGHT 2 = WAVY 3 = CURLED		<input type="text" value="3"/> 1 = ENTIRE 2 = DENTATE 3 = INCISED 4 = DEEPLY INCISED 5 = OTHER (Specify) _____										
8. LEAF SHAPE: <input type="text" value="1"/> 1 = ROUNDED 2 = POINTED		<input type="text" value="1"/> 1 = BROADER THAN LONG 2 = LONGER THAN BROAD 3 = OTHER (Specify) _____										
9. LEAF COLOR: (See reverse.) <input type="text" value="7"/> 1 = RED 2 = REDDISH-BROWN 3 = YELLOW 4 = YELLOWISH-GREEN 5 = GREYISH-GREEN 6 = BLUE-GREEN 7 = DARK-GREEN 8 = VERY DARK GREEN												
10. HEADS: <input type="text" value="1"/> 1 = SPHERICAL 2 = FLATTENED 3 = ELONGATE 4 = POINTED 5 = NON-HEADING		11. PLANT SIZE: (See reverse.) <input type="text" value="2"/> 1 = SMALL 2 = MEDIUM 3 = LARGE										
12. CULTURE: <input type="text" value="5"/> 1 = SUMMER CROP 2 = WINTER CROP 3 = NOT SPECIFIC 4 = UNDER GLASS 5 = OTHER (Specify) <u>Spring</u>												
13. SIZE OF 10-DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C.: (Place a zero in first box (i.e. 0 2)) when size is 9 mm. or less.) <input type="text" value="2"/> <input type="text" value="7"/> mm. LENGTH OF SEEDLING <input type="text" value="2"/> <input type="text" value="4"/> mm. LENGTH OF COTYLEDON <input type="text" value="0"/> <input type="text" value="6"/> mm. WIDTH OF COTYLEDON												
14. DISEASE RESISTANCE TO: (Enter zeroes in box(es) where there is no special disease resistance.) <table><tr><td><input type="text" value="1"/> 1 = TIPBURN</td><td><input type="text" value="1"/> 2 = MOSAIC</td><td><input type="text" value="0"/> 3 = DAMPING OFF</td><td><input type="text" value="1"/> 4 = DOWNY MILDEW</td></tr><tr><td><input type="text" value="0"/> 5 = SCLEROTINIA ROT</td><td><input type="text" value="0"/> 6 = BROWN BLIGHT</td><td><input type="text" value="-"/> 7 = BIG VEIN (1)</td><td><input type="text" value="0"/> 8 = OTHER (Specify) _____</td></tr></table>				<input type="text" value="1"/> 1 = TIPBURN	<input type="text" value="1"/> 2 = MOSAIC	<input type="text" value="0"/> 3 = DAMPING OFF	<input type="text" value="1"/> 4 = DOWNY MILDEW	<input type="text" value="0"/> 5 = SCLEROTINIA ROT	<input type="text" value="0"/> 6 = BROWN BLIGHT	<input type="text" value="-"/> 7 = BIG VEIN (1)	<input type="text" value="0"/> 8 = OTHER (Specify) _____	
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15. OUTLINE THE FOURTH LEAF: (For standardization purposes, the fourth leaf should be taken from a 20-day old plant grown under constant light.)

See attached sheet.

(1) Only susceptible and resistant classifications are listed. In trials this variety has been found to be tolerant to big vein being neither resistant nor susceptible.

* (Enter 0 - Not Treated; 1 - Susceptible; 2 - Resistant)

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16. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER		NAME OF VARIETY				
Leaf color		Salinas				
Leaf pigmentation		Vanguard				
Leaf shape		Vanguard				
Plant size		Vanguard				
Head size		Vanguard				
VARIETY	NO. OF DAYS TO HEAD MATURITY UNDER WINTER CROPPING	LOCATION	NO. OF DAYS TO HEAD MATURITY UNDER SUMMER CROPPING	LOCATION	NO. OF DAYS TO SEED STALK EMERGENCE UNDER SUMMER CROPPING	LOCATION
Submitted	116	Arizona, Imperial Valley	Not Adapted		66	San Juan Bautista, Calif
Similar	125	"	Not Adapted		76	"
Name of similar variety	Vanguard		Vanguard		Vanguard	

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. C. M. Rodenburg, 1960, Varieties of Lettuce, An International Monograph, Institut Voor de Veredeling van Tuinbouwgewassen, Wageningen, Holland.
2. L. L. Morse, 1930, Field Notes on Lettuce, published by Ferry-Morse Seed Co.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following lettuce varieties may be used as a guide to identify the eight colors listed on the form.

Color	Variety
Red	"Salad Trim"
Reddish-brown	"Ruby"
Yellow	"Salad Bowl"
Yellowish-green	"Oakleaf"
Greyish-green	"White Boston"
Bluish-green	"Bibb"
Dark-green	"Imperial" group
Very dark green	"Deer Tongue"

PLANT SIZE: The following varieties may be used as a guide to identify the plant type size:

TYPE	COMPARABLE VARIETIES		
	SMALL	MEDIUM	LARGE
Cutting (leaf)	Boston-Curled	Prize Head	Grand Rapids
Stalk (stem)	Celtuce	--	--
Cos	Express	Parris Island	Giant White
Crisphead	Mignonette	Hanson (Merit)	Climax
Butterhead	Tom Thumb	Big Boston	Mammoth Butter
Latin	Sucrine	Creole	Deer Tongue

Asgrow Seed Company

Lettuce ~~XP-480~~

CRISPY ~~4/7~~ 5/30/79

~~XP-480~~

CRISPY ~~4/7~~ 5/30/79

7900016

EXHIBIT D

Additional Description

Head size is approximately the same as Vanguard. The wrapper leaves give less head protection to the head under some, but not all, conditions but sunburn has not been any greater. Field holding without internal breakdown is better than Vanguard and XP 480 has shown more Big Vein tolerance. Leaves do not roll back along margin as much as Vanguard which gives a more upright wrapper leaf. In most instances leaves are more deeply incised than in Vanguard.



United States
Department of
Agriculture

Agricultural
Research
Service

Northern Plains Area
National Seed
Storage Laboratory

1111 South Mason Street
Fort Collins, CO 80521-4500
Telephone: 970 495-3200
Fax: 970 221-1427

February 14, 1997

Marian R. Minnifield, Secretary
Plant Variety Protection Office
NAL Building, Room 500
10301 Baltimore Boulevard
Beltsville, Maryland 20705-2351

Subject: Expired PVPO's; disposition of

1. The following expired PVPO's have been transferred to the NPGS. Our records have been changed accordingly.

Serial Number	PVP Number
101862	01 PVP 7800029
102219	01 PVP 7800010
102675	01 PVP 7800088
102676	01 PVP 7400011
103506	01 PVP 7800084
103507	01 PVP 7900016 ✓
103508	01 PVP 7800082
103840	01 PVP 7900017
103842	01 PVP 7900067
104549	01 PVP 7700106
104551	01 PVP 7100046
314988	01 PVP 9500276
101863	01 PVP 7800026
102222	01 PVP 7800078
102226	01 PVP 7800091
101854	01 PVP 7200134
102214	01 PVP 7605014
102216	01 PVP 7900011
102217	01 PVP 7800095
102218	01 PVP 7800093
102220	01 PVP 7800097
102221	01 PVP 7800042

97 FEB 25 1997

USD



United States
Department of
Agriculture

Agricultural
Research
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Northern Plains Area
National Seed
Storage Laboratory

1111 South Mason Street
Fort Collins, CO 80521-4500
Telephone: 970 495-3200
Fax: 970 221-1427

102673	01	PVP 7800059
103502	01	PVP 7800096
103503	01	PVP 7800074
103509	01	PVP 7900044
103510	01	PVP 7900047
103838	01	PVP 7500042
103843	01	PVP 7300101
101859	01	PVP 7200132
102227	01	PVP 7700085
103511	02	PVP 7800028
103839	01	PVP 7900049
103845	01	PVP 7900048
104548	02	PVP 7800057
104550	01	PVP 7800024

97 FEB 25 1997

USD

Sincerely,

GENE KEYS
Data Coordinator



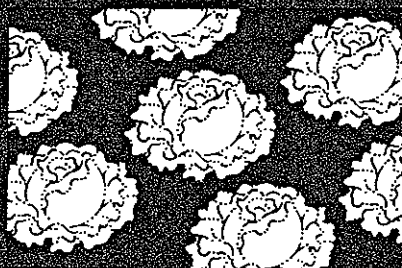
Lettuce

Crispy

Developed especially for the spring harvest period, Crispy provides a highly uniform, attractive head. Crispy is early for lettuce in the Vanguard maturity class, maturing up to one week earlier. Plants are of Vanguard type with a slightly smaller frame. Crispy carries excellent color well down the ribs for good market acceptance. It has a large core, firmness, and a smooth, attractive butt. It is tolerant to big vein. (PVP)

Precision planting with dependable Life-Coat II

Precision planting with Asgrow's exclusive Life-Coat seed coating can improve your profits. Most lettuce growers recognize the major benefits of seed coating... better plant



Efficient harvesting is promoted by uniform early maturity.

development, reduced thinning costs, better uniformity at harvest and better quality produce. Every lot of Asgrow's coated seed is subjected to five quality control tests... germination test, durability test, soak test, physical test, and plantability test. These five tests have helped Asgrow produce coated seeds, which growers have depended on for over ten years.



Asgrow Seed Company

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Transfer of Plant Variety Protection Act Rights

Asgrow Seed Company, a Delaware Corporation with its principle place of business at 2605 E. Kilgore Road, Kalamazoo MI 49001, is the owner of the Plant Variety Protection Act Certificates and applications for certificates listed on and attached as Exhibit A to this document (the "Certificates and Applications").

For good and valuable consideration, receipt of which is hereby acknowledged, Asgrow hereby transfers all of its right, title and interest in and to the Certificates and Applications and to all rights relating thereto under the Plant Variety Protection Act to Seminis Vegetable Seeds, Inc., a California corporation, whose principle place of business is at 1905 Lirio Street, Saticoy, CA 93007-4206.

Dated: January 31, 1997

Asgrow Seed Company

By: Norman A Braksik
Norman A. Braksik
President